

Claims

1. An HFA drug formulation comprising a partially or fully acylated alpha (α), beta (β) or gamma (γ) cyclodextrin.

2. A formulation according to claim 1 in which the HFA is HFA 134a, 227 or a mixture thereof.

3. A formulation according to claim 1 or 2 in the form of a solution.

4. A formulation according to claim 1 or 2 in the form of a suspension.

5. A formulation according to any one of claims 1 to 4 in which the cyclodextrin is acylated with one or more groups selected from Acetyl, Acryloyl, Alanyl, Aminocarbonyl, β -Alanyl, alkyl Azelaoyl, Benzoyl, tert-Butoxy, Butynyl, Caproyl, Crotonoyl, Formyl, alkyl Glutaryl, Glycoloyl, Glycyl, Glyoxyloyl, Heptadecanoyl, Hydroperoxy, Hydroxyamino, Isobutyryl, Isovaleryl, Lactoyl, Lenyl, Levulinoyl, alkyl Malonyl, Mandeloyl, Methacryloyl, Myristoyl, Monanoyl, alkyl Oxalyl, Palmitoyl, alkyl Pimeloyl, Pivaloyl, Propionyl, Salicyloyl, Seryl, Sorboyl, Stearoyl, alkyl Suberoyl, alkyl Succinyl, Thionyl, Tolnol, Valeryl or Valyl.

6. A formulation according to any one of claims 1 to 5 in which the drug is fluticasone propionate, beclomethasone dipropionate, flunisolide, budesonide, tiotropium, cortisone, prednisone, ephedrine, adrenaline, fenoterol, formoterol, isoprenaline, metaproterenol, salbutamol, albuterol, salmeterol, terbutaline and pharmaceutically acceptable salts and solvates thereof and combinations thereof.

7. A formulation according to any one of claims 1 to 6 in which there are two drugs and these are budesonide and formoterol fumarate dihydrate.

8. A formulation according to any one of claims 1 to 7 for the treatment or prophylaxis of a respiratory disease.

9. A formulation according to any one of claims 1 to 7 for the treatment or prophylaxis of asthma or COPD.

10. A method of treating a respiratory disease which comprised administering to a patient a therapeutically effective amount of a formulation according to any one of claims 1 to 7.

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